

U.S. Department of the Interior  
Bureau of Land Management  
White River Field Office  
220 E Market St  
Meeker, CO 81641

## Section 390

# Categorical Exclusion for Oil and Gas Development

NUMBER: DOI-BLM-CO-110-2011-0166-CX(390)

CASEFILE/PROJECT NUMBER: COC63322 (FG 4-44-2 and FG 4-24-2)  
COC75169 (Access Road ROW)  
COC75181 (Pad location off lease)

PROJECT NAME: Laramie Energy's Proposed Fletcher Gulch Wells FG 4-44-2 and FG 4-24-2 (2 APDs)

LEGAL DESCRIPTION: T. 1 N., R. 100 W., 6<sup>th</sup> Principle Meridian  
Section 2, Lots 9, 10, 14, 15, 19  
Section 3, Lots 8-12, 16  
Section 4, Lots 5, 12, 13  
Section 9, Lot 9  
Section 10, Lot 13  
Section 11, Lots 2, 3, 6, 7, 9, 12  
Section 14, Lots 4, 6, 7  
Section 15, Lots 2, 3, 7-9

APPLICANT: Laramie Energy II, LLC

BACKGROUND: As part of a Joint Venture with Laramie Energy Gas and Oil, LLC (Lessee of Record), Laramie Energy II, LLC is proposing to drill and complete two exploratory oil wells to the Dakota Formation to determine production capabilities, reservoir characteristics, and economic viability in Fletcher Gulch (See Figures 1 and 2).

There are two existing coal-bed methane wells in close proximity to the proposed wells, and these locations were analyzed in CO-110-2006-200-EA (signed on 9/21/2006). Because of their small size, and because enlarging each pad would result in excessive cut and fill to drop the elevation of each pad, it was decided at the onsite to construct the new natural gas well pads adjacent to, and at higher elevations than, the existing coal-bed methane well pads.

The roads for the Genesis Fletcher Gulch project were analyzed in CO-110-2009-0180-EA (signed on 12/8/2009)

#### DESCRIPTION OF PROPOSED ACTION:

##### FG 4-44-2

The proposed FG 4-44-2 well would be drilled from the FG 4-44-2 well pad and would require approximately 4.7 acres of disturbance to construct the well pad and access corridor. Of that, approximately 0.4 acres would be disturbed to construct the proposed 180 foot access corridor. The pipeline for this well will be considered separately at a later date.

##### FG 4-24-2

The proposed FG 4-24-2 well would be drilled from the FG 4-24-2 well pad and would require approximately 4.1 acres of disturbance to construct the well pad and access road. Approximately 0.2 acres would be disturbed to construct the proposed 350 foot access corridor. The pipeline for this well will be considered separately at a later date.

No new access road is planned at this time other than the entries to the new locations. Laramie II anticipates some additional gravel and drainage work may be required for stormwater management. The only new road construction by LEII will be 180 feet for the entry to the 4-24-2 well pad and 350 feet for the entry to the 4-44-2 well pad.

This action, if approved and implemented, would result in approximately 9 acres of new surface disturbance to build each pad and construct each access road.

#### Right-of-Way Information:

Laramie Energy II, LLC is requesting a Right-of-Way (ROW) for an existing access road to access Fletcher Gulch Federal wells 4-24-2 and 4-44-2. The entire length of the road ROW is existing except for 180 feet for entry to 4-24-2 well pad and 350 feet for the entry to the 4-44-2 well pad. The road ROW will have a 30' width and 35,205 feet length of off-lease road.

Proposed well pad 4-44-2 has been moved approximately 200 feet east of its original location to an alternative site outside the BLM's No Surface Occupancy (NSO) raptor buffer. The new location has a portion of the pad located outside of the lease boundary. A site ROW will be issued for the 1.9 acres of pad off lease.

#### Design Features:

The applicant has agreed to the following design features:

1. The Bureau of Land Management, White River Field Office, (970) 878-3818, will be notified at least forty-eight (48) hours before starting reclamation work that involves earth-moving equipment and upon completion of restoration measures.

2. Immediately upon completion of drilling and completion operations, the location and surrounding area will be cleared of all remaining debris, materials, and trash not required for production, and hauled to the nearest legal landfill.
3. The backfilling of the cuttings pit will be done in such a manner that the cuttings will be confined to the pit and not squeezed out and incorporated in the surface materials. There will be a minimum of three feet of cover (overburden) on the pit. When work is complete, the pit area will support the weight of heavy equipment without sinking.
4. After completion activities, LE II will reduce the size of the well pad to the minimum surface area needed for production operations, while providing for reshaping and stabilization of cut and fill slopes. Slopes will be re-contoured to minimize areas that exceed a 3:1 slope. Any areas exceeding the 3:1 slope criteria or high walls shall be reclaimed using enhanced stabilization and erosion prevention methods.
5. Upon completion of backfilling, leveling, and re-contouring, the stockpiled topsoil will be evenly spread over the reclaimed area(s). Prior to reseeding, all disturbed surfaces will be scarified and left with a rough surface. No depressions will be left that would trap water and form ponds. Any stockpiled ground cover will be evenly distributed over the disturbed areas.
6. Monitoring of interim reclamation will include photographic documentation and vegetation cover class plots. These plots will quantify the canopy cover for weeds, grass, forb, shrub, and tree groups. Results will be compared to reference plots in similar vegetation types of undisturbed adjacent areas to determine reclamation goals.
7. Monitoring of final reclamation will include photographic documentation and vegetation cover class plots. These plots will quantify the canopy cover for weeds, grass, forb, shrub, and tree groups. Results will be compared to reference plots in similar vegetation types of undisturbed adjacent areas to determine reclamation goals.

Decision to be Made: The BLM will decide whether or not to approve the Proposed Action, which includes construction, operation, and maintenance of the two wells and access roads.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Page 2-5

Decision Language: “Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values.”

CATEGORICAL EXCLUSION REVIEW: The Energy Policy Act of 2005 (P.L. 109-58) prescribed five categorical exclusions (CX) for activities whose purpose is for the exploration of oil or gas.

The Proposed Action qualifies as a categorical exclusion under the Section 390 of the Energy Policy Act, #1: *“Individual surface disturbances of less than five acres so long as the total surface disturbance on the lease is not greater than 150 acres and site-specific analysis in a document prepared pursuant to the NEPA has been previously completed.”*

Documentation

The BLM NEPA Handbook (H-1790-1) provides specific instructions for using this CX.

*1) Is surface disturbance associated with the Proposed Action less than five acres?*

The BLM NEPA Handbook clarifies that “if more than one action is proposed for a lease (for example, two or more wells), each activity is counted separately and each may disturb up to five acres.” Surface disturbance associated with the well pad and access road for the FG 4-44-2 well is approximately 4.7 acres. Surface disturbance associated with the well pad and access road for the FG 4-24-2 well is approximately 4.3 acres.

*2) Is there less than 150 acres of surface disturbance, including the Proposed Action, on the entire leasehold?*

Surface disturbance on the entire leasehold (COC63322), based on review of the 2009 aerial photo and review of all new disturbance features (proposed and existing) on the entire leasehold, is approximately 68 acres or less.

*3) Is the Proposed Action within the boundaries of an area included in a site-specific NEPA document? (The NEPA document must have analyzed the exploration and/or development of oil and gas (not just leasing) and the action/activity being considered must be within the boundaries of the area analyzed in the environmental assessment (EA) or environmental impact statement (EIS). The NEPA document need not have addressed the specific permit or application being considered.)*

Yes. NEPA document CO-110-2006-200-EA analyzed 11 wells and 11 well pads. The locations that were analyzed in CO-110-2006-200-EA that apply to this action are location 4-24 (applies to proposed location 4-24-2) and location 4-44 (applies to proposed location 4-44-2).

INTERDISCIPLINARY REVIEW:

The Proposed Action was presented to, and reviewed by, the White River Field Office interdisciplinary team on 3/8/2011. A complete list of resource specialists who participated in this review is available upon request from the White River Field Office. The table below lists

resource specialists who provided additional remarks concerning cultural resources and special status species.

Name	Title	Resource	Date
Michael Selle	Archaeologist	Cultural Resources, Native American Religious Concerns	10/18/2011
Lisa Belmonte	Wildlife Biologist	Special Status Wildlife Species	10/19/2011
Zoe Miller	Ecologist	Special Status Plant Species	10/7/2011

**REMARKS:**

*Cultural Resources:* The proposed project area has been inventoried at the Class III (100 percent pedestrian) level (Davenport 2011 compliance dated 9/19/2011) with no new cultural resources identified in the inventoried area. There are no known cultural resources within 1,000 feet (305 meters) of the project.

Access roads into the area have been inventoried at the Class III (100 percent pedestrian) level (Conner 2004 compliance dated 7/20/2004, McDonald 2006 compliance dated 8/31/2006). One historic cabin, shown on the USGS maps (5RB.5356) is in the project vicinity. The historic cabin is not considered eligible but avoidance of the cabin is recommended.

*Paleontological Resources:* The proposed 4-24-2 location is located in an area generally mapped as the Wasatch Formation (Tweto) which the BLM, WRFO has classified as a PFYC 5 formation meaning it is known to produce scientifically noteworthy fossil resources (c.f. Armstrong and Wolny 1989). If it becomes necessary to excavate into the underlying sedimentary rock formation to level the well pad, upgrade the access to the pad, or excavate the reserve/blooi/cuttings pit there is a high potential to impact scientifically noteworthy fossil resources. Impacts to fossil resources as a result of construction would result in some loss of scientific data including both the fossils themselves and any contextual data associated with them.

The proposed 4-44-2 location is located in an area where two formations appear to intersect. The formations are the Wasatch and the Williams Fork (Tweto 1979) which the BLM, WRFO have classified as PFYC 5 formations. Both formations are known to produce fossils that are scientifically noteworthy (C.f. Armstrong and Wolny 1989). Because construction activities associated with the proposed 4-44-2 well pad location may impact two different formations, it will not be possible to assess impacts until on-the-ground work begins; there could be severe impacts to one or both formations and the different resources that might be present. The Wasatch is known for fossil mammals, reptiles, birds, and marsupial mammals while the Williams Fork Formation produces dinosaurs, mammals, multituberculates, marsupial mammals, reptiles, fish, and occasionally well preserved plants (c.f. Armstrong and Wolny 1989). Impacts could become quite substantial depending on fossils or formations identified by the paleontological monitor. Some data loss will occur in either location though monitoring could result in the recovery of

some scientifically noteworthy fossils and related environmental data. However, there could be a net loss of data in the regional paleontological database as a result of pad construction.

*Threatened and Endangered Wildlife Species:* There are no threatened or endangered animal species that are known to inhabit or derive important use from the project area.

The project area is encompassed by mule deer critical winter and severe winter ranges (Colorado Parks and Wildlife NDIS 2011). Based on discussions with Colorado Parks and Wildlife District Wildlife Manager (personal comm. Terry Wygant (10/18/11)), this area in particular receives heavy use by mule deer during the rut and prior to accumulations of snow depths that force movements to lower elevations. Activities associated with pad development including vegetation clearing, drilling, and particularly vehicle traffic through the area, can add undue stress to animals, elevate energetic demands, and may disrupt successful reproduction.

The proposed locations are comprised of mixed-aged to mature pinyon-juniper woodlands. These woodlands may provide suitable nest substrate for woodland raptors including: sharp-shinned and Cooper's hawk, red-tailed hawk, great horned owl, long-eared owl, and saw-whet owl. A raptor survey was conducted in August 2011 within 0.25 miles (woodland habitat) and 0.50 miles (cliff habitat) of the project area. No raptor nests were located within the project area.

*Threatened and Endangered Plant Species:* The BLM sensitive species debris milkvetch (*Astragalus detritalis*) is located approximately 615 m to the west of the project area. Westwater Engineering surveyed the area to confirm that there were no other special status plant species populations within 100 m of the project area. No other populations were found. Because of the distance and topographic differences, the Proposed Action should not impact the special status plant species.

#### REFERENCES CITED:

- Armstrong, Harley J., and David G. Wolny  
1989 Paleontological Resources of Northwest Colorado: A Regional Analysis. Museum of Western Colorado, Grand Junction, Colorado.
- Colorado Parks and Wildlife  
2011 Colorado Parks and Wildlife; Natural Diversity Information System. Available online at <http://ndis.nrel.colostate.edu/index.html>.
- Davenport, Barbara  
2011 Class III Cultural Resources Inventory for the Proposed Fletcher Gulch Federal #4-24-2 and #4-44-2 Well Locations in Rio Blanco County, Colorado for Laramie Energy II. Grand River Institute, Grand Junction, Colorado. (11-11-30)
- McDonald, Kae  
2006 Genesis Gas and Oil, LLC, Fletcher Gulch Exploratory Wells and Access Roads Class III Cultural Resource Inventory Rio Blanco County, Colorado. Flattops

Archaeological Consultants, LLC., Glenwood Springs, Colorado. (06-154-01: SHPO # RB.LM.R970)

Tweto, Ogden

1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

MITIGATION:

1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for disturbing or collecting vertebrate fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands.
2. If any paleontological resources are discovered as a result of operations under this authorization, the operator or any of his agents must stop work immediately at that site, immediately contact the BLM Paleontology Coordinator, and make every effort to protect the site from further impacts, including looting, erosion, or other human or natural damage. Work may not resume at that location until approved by the AO. The BLM or designated paleontologist will evaluate the discovery and take action to protect or remove the resource within 10 working days. Within 10 days, the operator will be allowed to continue construction through the site, or will be given the choice of either (a) following the Paleontology Coordinator's instructions for stabilizing the fossil resource in place and avoiding further disturbance to the fossil resource, or (b) following the Paleontology Coordinator's instructions for mitigating impacts to the fossil resource prior to continuing construction through the project area.
3. If it becomes necessary to excavate into the underlying sedimentary rock formation to construct the reserve/blooi/cuttings pit or bury any well tie pipelines an approved paleontological monitor shall be present on site before any such excavations begin and shall remain until all such excavation operations have been completed.
4. If any archaeological materials are discovered as a result of operations under this authorization, activity in the vicinity of the discovery will cease, and the BLM WRFO Archaeologist will be notified immediately. Work may not resume at that location until approved by the AO. The operator will make every effort to protect the site from further impacts including looting, erosion, or other human or natural damage until BLM determines a treatment approach, and the treatment is completed. Unless previously determined in treatment plans or agreements, BLM will evaluate the cultural resources and, in consultation with the State Historic Preservation Office (SHPO), select the appropriate mitigation option within 48 hours of the discovery. The operator, under guidance of the BLM, will implement the mitigation in a timely manner. The process will be fully documented in reports, site forms, maps, drawings, and photographs. The BLM will forward documentation to the SHPO for review and concurrence.
5. Pursuant to 43 CFR 10.4(g), the operator must notify the AO, by telephone and written confirmation, immediately upon the discovery of human remains, funerary items, sacred

objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), the operator must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.

6. No activities associated with both the FG 4-44-2 and the FG 4-24-2 locations (e.g., drilling, construction etc.) will be allowed from November 1 through December 30 to prevent disruption of mule deer during the rut and prior to their movement to lower elevations. Any activities, including pad construction, drilling, completion activities, and vehicle traffic associated with well development initiated prior to November 1 must be completed or cease by October 31.
7. The designated Natural Resource Specialist (NRS) will be notified via email or by phone 24 hours prior to beginning all construction-related activities associated with this project that result in disturbance of surface soils. Construction-related activities may include, but are not limited to, pad and road construction, etc. Notification of all construction-related activities, regardless of size, that result in disturbance of surface soils as a result of this project is required.
8. In an attempt to track interim and final reclamation of federal actions related to the development of federal mineral resources, the operator shall provide the designated Natural Resource Specialist with geospatial data in a format compatible with the WRFO's ESRI ArcGIS Geographic Information System (GIS). These data will be used to accurately locate and identify all geographic as-built (i.e., constructed) features associated with this project and included in the Application for Permit to Drill (APD) or Sundry Notice (SN), as appropriate. These data shall be submitted within 60 days of construction completion. If the operator is unable to submit the required information within the specified time period, the operator shall notify the designated Natural Resource Specialist via email or by phone, and provide justification supporting an extension of the required data submission time period. GIS polygon features may include, but are not limited to, constructed access roads, existing roads that were upgraded, pipeline corridors, and well pad footprints. Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better; (2) ESRI shapefiles or geodatabases; or, (3) AutoCAD .dwg or .dxf files. If possible, both (2) and (3) should be submitted for each as-build feature. Geospatial data must be submitted in UTM Zone 13N, NAD 83, in units of meters. Data may be submitted as: (1) an email attachment; or (2) on a standard compact disk (CD) in compressed (WinZip only), or uncompressed format. All data shall include metadata, for each submitted layer, that conforms to the *Content Standards for Digital Geospatial Metadata* from the Federal Geographic Data Committee standards. Questions shall be directed to WRFO BLM GIS staff at (970) 878-3800.

If the operator is unable to send the data electronically, the operator shall submit the data on compact disk(s) to:

BLM, White River Field Office  
Attn: NRS Staff  
220 East Market Street  
Meeker, Colorado 81641



Internal and external review of the reporting process and the adequacy of the associated information to meet established goals will be conducted on an on-going basis. New information or changes in the reporting process will be incorporated into the request, as appropriate. Subsequent permit application processing may be dependent upon successful execution of this request, as stated above.

If for any reason the location or orientation of the geographic feature associated with the Proposed Action changes, the operator shall submit updated GIS data to designated BLM NRS staff person within 7 calendar days of the change. This information shall be submitted via Sundry Notice.

9. A Reclamation Status Report will be submitted electronically via email and as a hard-copy to WRFO Reclamation Coordinator. Please submit the hardcopy to:

BLM, White River Field Office  
220 East Market Street  
Meeker, Colorado 81641  
Attn: Brett Smithers

The Reclamation Status Report will be submitted annually for all actions that require disturbance of surface soils on BLM-administered lands as a result of the Proposed Action. Actions may include, but are not limited to, well pad and road construction, construction of ancillary facilities, or power line and pipeline construction. The Reclamation Status Report will be submitted by September 30<sup>th</sup> of each calendar year, and will include the well number, API number, legal description, UTM coordinates (using the NAD83 datum, Zone 13N coordinate system), project description (e.g., well pad, pipeline, etc.), reclamation status (e.g., Phase I Interim, Phase II Interim, or Final), whether the well pad or pipeline has been re-vegetated and/or re-contoured, percent of the disturbed area that has been reclaimed, method used to estimate percent area reclaimed (e.g., qualitative or quantitative), technique used to estimate percent area reclaimed (e.g., ocular, line-intercept, etc.), date seeded, photos of the reclaimed site, estimate of acres seeded, seeding method (e.g., broadcast, drilled, hydro-seeded, etc.), and contact information for the person(s) responsible for developing the report. The report will be accompanied with maps and GIS data showing each discrete point (i.e., well pad), polygon (i.e., area where seed was applied for Phase I and/or Phase II interim reclamation or area reclaimed for final reclamation), or polyline (i.e., pipeline) feature that was included in the report. Geospatial data shall be submitted: for each completed activity electronically to the designated BLM staff person responsible for the initial request and in accordance with WRFO geospatial data submittal standards (available from WRFO GIS Staff, or on the WRFO website). Internal and external review of the WRFO Reclamation Status Report, and the process used to acquire the necessary information will be conducted annually, and new information or changes in the reporting process will be incorporated into the report.

The following applicable mitigation from CO-110-2006-200-EA and CO-110-2009-180-EA has been carried forward:

1. Laramie Energy will comply with all local, state, and federal air quality regulations and provide documentation to the BLM that they have acquired all necessary state and federal permits. To minimize fugitive dust created by construction and drilling activities, Laramie Energy may wet disturbed areas with fresh water from a permitted source. Vehicle traffic may also be restricted to speeds that would minimize fugitive dust. Adherence to reclamation requirements for surface disturbance activities (refer to Water Quality and Soils) would be followed to stabilize disturbed soils and blowing dust.
2. Proper seeding and monitoring of the disturbed areas will reduce the potential for invasive, non-native species to establish. Adherence to BLM reclamation measures will minimize impacts from invasive, non-native species. Cleaning of all vehicles and heavy machinery to remove seed and soil prior to construction and drilling activities would also reduce the potential for the introduction of invasive species into the project area. Laramie Energy will be required to monitor the project area for noxious and invasive species for a minimum of three years after disturbance. All noxious and invasive species which occur on site would be eradicated using materials and methods approved in advance by the BLM.
3. Laramie Energy would be responsible for implementing mitigation measures that minimize bird injuries or mortalities as a result of contact with reserve pits. The most common measure being used is placing netting or wiring over reserve pits. Laramie Energy will notify the BLM of the method that will be used to prevent impacts to birds two weeks prior to the date when completion activities are expected to begin via Sundry Notice. The BLM-approved method will be applied within 24 hours after completion activities have begun. All lethal and non-lethal events that involve migratory birds will be reported to the Petroleum Engineer Technician immediately.
4. Laramie Energy will comply with “Gold Book” fourth edition surface operating standards for all surface disturbing activities (copies of the “Gold Book” fourth edition can be obtained at the WRFO). Laramie Energy will restrict non-emergency maintenance activities associated access roads when soils become saturated to a depth of three inches or more. Laramie Energy will be responsible for complying with all local, state, and federal water quality regulations (such as but not limited to Phase I Storm Water Permit, Army Corps Section 404 permit coverage, and Industrial Wastewater/Produced Water Permits).
5. Laramie Energy will consult with the State of Colorado Water Quality Control Division regarding Stormwater Discharge Permits prior to commencing construction activities. Construction activities that disturb one acre or greater require a Stormwater Discharge Permit. Written documentation to the BLM Authorized Officer is required within 30 days of the APD approval date to indicate that appropriate permits have been obtained. Written documentation may be a copy of the Stormwater Discharge Permit or an official verification letter from the State Water Quality Control Division to Laramie Energy that includes the Permit Certification Number. For further information contact Bob Lange, WRFO Hydrologist at 970-878-3831.

6. To mitigate additional soil erosion and potential increased sediment and salt loading to nearby surface waters, all disturbed areas affected by drilling or subsequent operations, except areas needed for production operations, shall be reclaimed to their original condition and shall be maintained to control dust and minimize erosion (COGCC). To allow optimal opportunity for interim reclamation of well pads, all tanks and production facilities will be situated on the access road side of the well pad (unless otherwise approved by the WRFO-BLM Area Manager). Interim reclamation of well pads and final reclamation of rights of ways (ROW) will commence as follows:
- Stockpiled topsoil and spoil piles will be separated and clearly identified to prevent mixing during reclamation efforts. Topsoil stockpiles will be seed with a BLM approved seed mixture.
  - Stockpiled topsoil segregated from spoil piles will be replaced during reclamation in its respective original position (last out, first in) to minimize mixing of soil horizons.
  - Stockpiled soils (spoil and topsoil) will be pulled back over all disturbed surfaces affected by drilling or subsequent operations, except areas reasonably needed for production operations. Areas not needed for production operations shall be partially reshaped as early and as nearly as practicable to near pre-construction contours.
  - Laramie Energy will ensure stockpiled topsoil is evenly distributed over the top of spoil used in partial reshaping efforts.
  - The partially reshaped area will be seeded with a BLM approved seed mixture, and all slopes exceeding 5 percent will be covered with wildlife friendly biodegradable fabrics (such as but not limited to Jute blankets, Curlex, etc.) to provide additional protection to topsoil, retain soil moisture, and help promote desired vegetative growth.
  - Following seeding and placement of biodegradable fabrics, woody debris cleared during initial construction will be pulled back over the partially reshaped area to act as flow deflectors and sediment traps. Woody debris will be evenly distributed over the entire portion of the reclaimed area and will not account for more than 20 percent of total ground cover.
  - Laramie Energy will be responsible for excluding livestock from all reclaimed portions of well pads. To eliminate livestock utilization of reclaimed areas prior to successful reclamation, a 4-strand BLM Type-D barbed wire fence braced with wooden H-posts at each corner will be constructed around all reclaimed portions of well pads including cut and fill slopes following placement of woody debris. Cattle guards would also be installed where fences cross access roads.
  - Laramie Energy will be required to monitor all reclaimed areas for signs of erosion and the presence of noxious and invasive plant species. If problems arise Laramie Energy will consult with the BLM for further assistance.
  - It will be the responsibility of Laramie Energy to continue revegetation/reclamation efforts until vegetative communities on all disturbed surfaces are composed of desirable seeded vegetation (as determined by the BLM). Laramie Energy will be responsible for achieving a reclamation success rate of sufficient vegetation ground cover from reclaimed plant species within three growing seasons after the application of seed. The ground cover of reclaimed seed species shall be comparable to that of the nearby undisturbed plant communities at a Potential Natural Community (PNC) state in relation to the seed mix as

deemed appropriate by the BLM. Rehabilitation efforts must be repeated if it is concluded that the success rate is below an expectable level as determined by the BLM.

7. Upon final abandonment of well pads, 100 percent of all disturbed surfaces (including newly constructed access roads) will be restored to pre-construction contours, and revegetated with a BLM preferred seed mixture. Existing two-track roads improved for fluid mineral development will be reclaimed as nearly as practicable to original conditions. Natural drainage patterns will be restored and stabilized with a combination of vegetative (seeding) and non-vegetative (straw bales, woody debris, straw waddles, biodegradable fabrics) techniques. All available woody debris will be pulled back over recontoured areas (woody debris will not account for more than 20 percent of total surface cover) to help stabilize soils, trap moisture, and provide cover for vegetation. Monitoring and additional reclamation efforts will persist until reclamation is proven successful (as determined by the BLM).
8. The White River ROD/RMP (USDI BLM 1997) includes Conditions of Approval (COAs) for all surface disturbing activities, road construction and maintenance, and oil and gas exploration. Laramie Energy will be required to implement these COAs on-site as conditions warrant. COAs for surface disturbing activities and road construction and maintenance that are pertinent to minimizing the Proposed Action's impacts to surface and groundwater quality include:
  - Topsoil should be stripped from the surface and stockpiled for reclamation. When topsoil is stockpiled on slopes exceeding 5 percent, construct a berm or trench below the stockpile.
  - Sedimentation shall be diverted and/or run through catchment basins to protect surface waters.
  - All sediment control structures or disposal pits will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years.
  - All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the AO.
  - There shall be no mud blading of roads.
  - Provide vegetative or artificial stabilization of cut and fill slopes. Avoid establishment of vegetation where it inhibits drainage from the road surface.
  - Provide for erosion-resistant surface drainage prior to fall rain or snow.
  - Maintenance should be performed to conserve existing surface material, retain the original crowned or outsloped self-draining cross section, prevent or remove rutting berms (except those designed for slope protection) and other irregularities that retard normal surface runoff.
  - All fluid storage tanks shall have a dike constructed around the tank of sufficient capacity to adequately contain at least 110 percent of the storage capacity of the tank.
  - Pits designed to contain fluids shall be constructed so that leaking or breaching problems are minimized and reclamation potential is maximized. When fractured rock or porous materials are encountered, pits shall be lined with bentonite or an impermeable membrane to prevent leakage.
  - Aquifers beneficial for human consumption encountered during the drilling process must be properly isolated to reduce the potential for contamination.

9. All road and well pad construction must adhere to “Gold Book” (Fourth Edition) surface operating standards for oil and gas exploration and development. A copy of the “Gold Book” (Fourth Edition) can be obtained at the WRFO. Laramie Energy will be responsible for segregating topsoil material and backfilling of topsoil in its respective original position (last out, first in) to assist in the reestablishment of soil health and productivity. Erosion and sediment control measures will be installed on all slopes exceeding five percent to mitigate soil loss. Erosion and sediment control measures will be maintained until stream banks and adjacent upland areas are stabilized. All disturbed surfaces will be restored to natural contours and revegetated with a BLM approved seed mixture. Interim reclamation will follow the mitigation outlined in the Water Quality portion of this document. Furthermore, Laramie Energy will be responsible for monitoring salts leaching from soils. If large salt deposits begin to appear, Laramie Energy will notify BLM, together they will coordinate the application of best management practices to help mitigate the problem.
10. Laramie Energy would be responsible for reclamation of unused portions of well pads, including re-seeding with a BLM-approved seed mix and noxious weed management. Seed mixes that should be used for reclamation are provided in Table 1 and are based on the ecological site defined by the soil mapping units within the project area (USDI BLM 1994). Laramie Energy would be required to monitor the project area for a minimum of 3 years after construction to detect the presence of noxious/invasive species. If found, noxious weeds would be eradicated using materials and methods approved in advance by the AO. Stripped topsoil and vegetation would be stockpiled for subsequent reclamation of unused areas of the well pads.

Table 1. Native seed mixes appropriate for reclamation efforts for the proposed project area.

Seed Mix	Species	Lbs/Acre	Range Site Occurring in the Project Area
2	Western wheatgrass (Arriba)	3	Clayey foothills, clayey slopes
	Streambank wheatgrass (Sodar)	2	
	Thickspike wheatgrass (Critana)	2	
	Fourwing saltbush (Wytana, Ricon)	2	
4	Western wheatgrass (Rosanna)	2	Piñon-juniper woodlands, stony foothills
	Bluebunch wheatgrass (Secar)	2	
	Thickspike wheatgrass (Critana)	2	
	Indian ricegrass (Nezpar)	1	
	Fourwing saltbush (Wytana)	1	
	Utah sweetvetch	1	
7	Bluebunch wheatgrass (Secar)	2	Deep clay loam
	Slender wheatgrass (Primar)	2	
	Big bluegrass (Sherman)	1	
	Canby bluegrass (Canbar)	1	
	Mountain brome (Bromar)	2	

11. Any spills or releases of hazardous substances would be cleaned up and disposed of in accordance with applicable requirements and spill response plans.

12. Proposed well # 4-44 has been moved approximately 200 feet east of its original location to an alternate site outside the BLM's NSO raptor buffer. Consistent with the White River ROD/RMP, construction, drilling, and completion operations associated with location # 4-44 would be subject to a timing restriction disallowing activity from February 1 to August 15 or until it has been determined that the raptor nest site is not occupied or the young have fledged.
13. Fire avoidance and prevention measures would be implemented and described in the APD's Surface Use Plan. Laramie Energy has two options for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12 inches in diameter and 15 feet' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and effectively breaks down the woody fuel thereby eliminating any hazardous fuel load adjacent to the new roads and well pads. The other option would be to cut trees and have them removed for firewood, posts, or other products. The branches and tops should be lopped and scattered to a depth of 24 inches or less. Some of the boles of the trees should be retained to be brought back onto reclaimed areas as stated in the Water Quality Section. These stored materials must not be windrowed as they will result in an elevated hazardous fuel situation and when placed onto reclaimed areas, the material should be evenly scattered, so as to not create jackpots, not to exceed 5 tons /acre.
14. As listed in the COAs for all surface disturbing activities (USDI BLM 1997), Laramie Energy would be required to purchase from the BLM all trees that would be removed as a result of the Proposed Action. Reclamation measures required by Laramie Energy are described in the Vegetation Section. In general, Laramie Energy would revegetate all unused portions of the well pads with a native seed mix to stabilize soils and regenerate native vegetation. Well pads would be fenced to exclude livestock during interim reclamation. Monitoring for invasive species during interim reclamation would occur for three years.
15. The proposed wells would be cemented and cased to prevent contamination of natural gas or produced water from impacting geological substrates and aquifers. If additional wells are proposed for the project area in the future, limit future development to a sustainable amount.
16. All aquifers encountered during the drilling that have potential for development as a water well will be evaluated for use by the BLM as a water source well at the time the well is proposed to be plugged. Suitable wells would have plugging procedures altered to plug back to the water zone, at which point, the BLM would assume liability for the well and file for the appropriate water rights.
17. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of three inches deep, the soil shall be deemed too wet to adequately support construction equipment.

18. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, Laramie Energy shall obtain from the AO written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the AO. Emergency use of pesticides shall be approved in writing by the AO prior to such use.
19. Laramie Energy shall protect all survey monuments found within the ROW. Survey monuments include, but are not limited to, General Land Office (GLO) and BLM Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, Laramie Energy shall immediately report the incident, in writing, to the AO and the respective installing authority if known. Where GLO or BLM ROW monuments or references are obliterated during operations, Laramie Energy shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands in the United States, latest edition. Laramie Energy shall record such survey in the appropriate county and send a copy to the AO. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, Laramie Energy shall be responsible for the survey cost.
20. Laramie Energy shall uniformly spread topsoil over all unoccupied disturbed area (outside the ditch line, fence line, and work area). Spreading shall not be done when the ground or topsoil is frozen or wet.
21. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
22. If snow removal from road is undertaken, equipment used for snow removal operations shall be equipped with shoes to keep the blade 3 inches off the road surface. Holder shall take special precautions where the surface of the road is uneven and at drainage crossings to ensure that equipment blades do not destroy vegetation.
23. Under no circumstances, will mud-blading be allowed at any time.
24. As directed by the AO, all road segments shall be winterized by providing a well-drained roadway by water baring, maintaining drainage, and any additional measures necessary to minimize erosion and other damage to the roadway or the surrounding public land.
25. All permanent (i.e., onsite for six months or longer) structures, facilities, and equipment placed onsite shall be low profile and painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation.

MONITORING AND COMPLIANCE: On-going compliance inspections and monitoring will be conducted by the BLM White River Field Office staff during and after construction. Specific mitigation developed in this document will be followed. The operator will be notified of compliance related issues in writing, and depending on the nature of the issue(s), will be provided 30 days to resolve such issues.

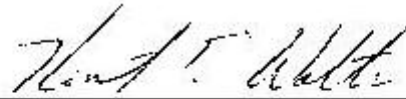
NAME OF PREPARER: Brett Smithers

NAME OF ENVIRONMENTAL COORDINATOR: Heather Sauls

COMPLIANCE WITH NEPA

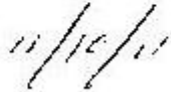
The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with Section 390 of the Energy Policy Act.

SIGNATURE OF AUTHORIZED OFFICIAL:



Field Manager

DATE SIGNED:



ATTACHMENTS:

Figure 1. Proposed disturbance features and existing disturbance features.

Figure 2. Proposed disturbance features and existing topography.



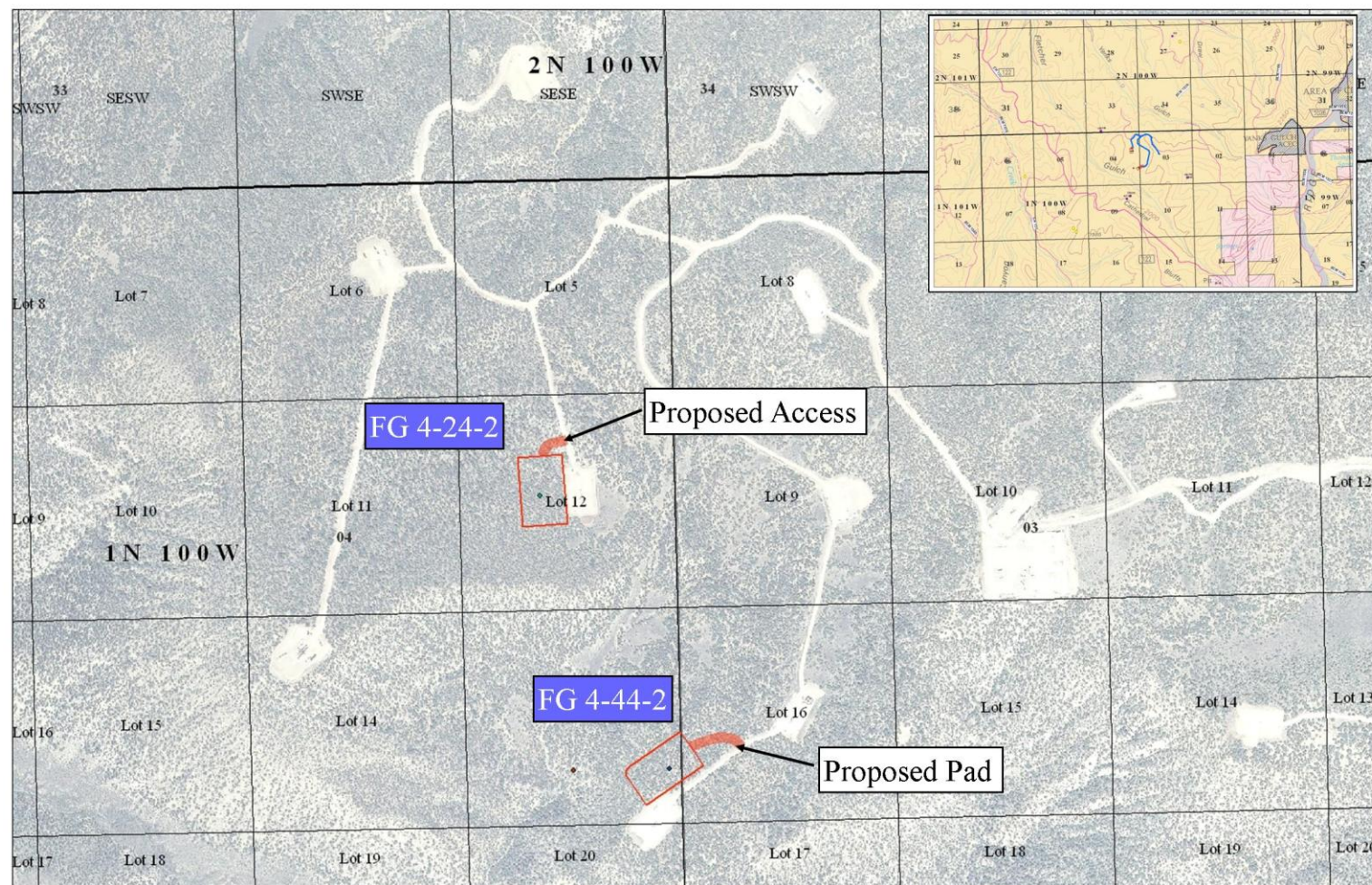


Figure 1. The figure above illustrates the geographic location of each proposed well pad (symbolized as a red polygon) and existing disturbance. The proposed access corridors are symbolized as a transparent red line. Construction activities would begin in January, 2011.



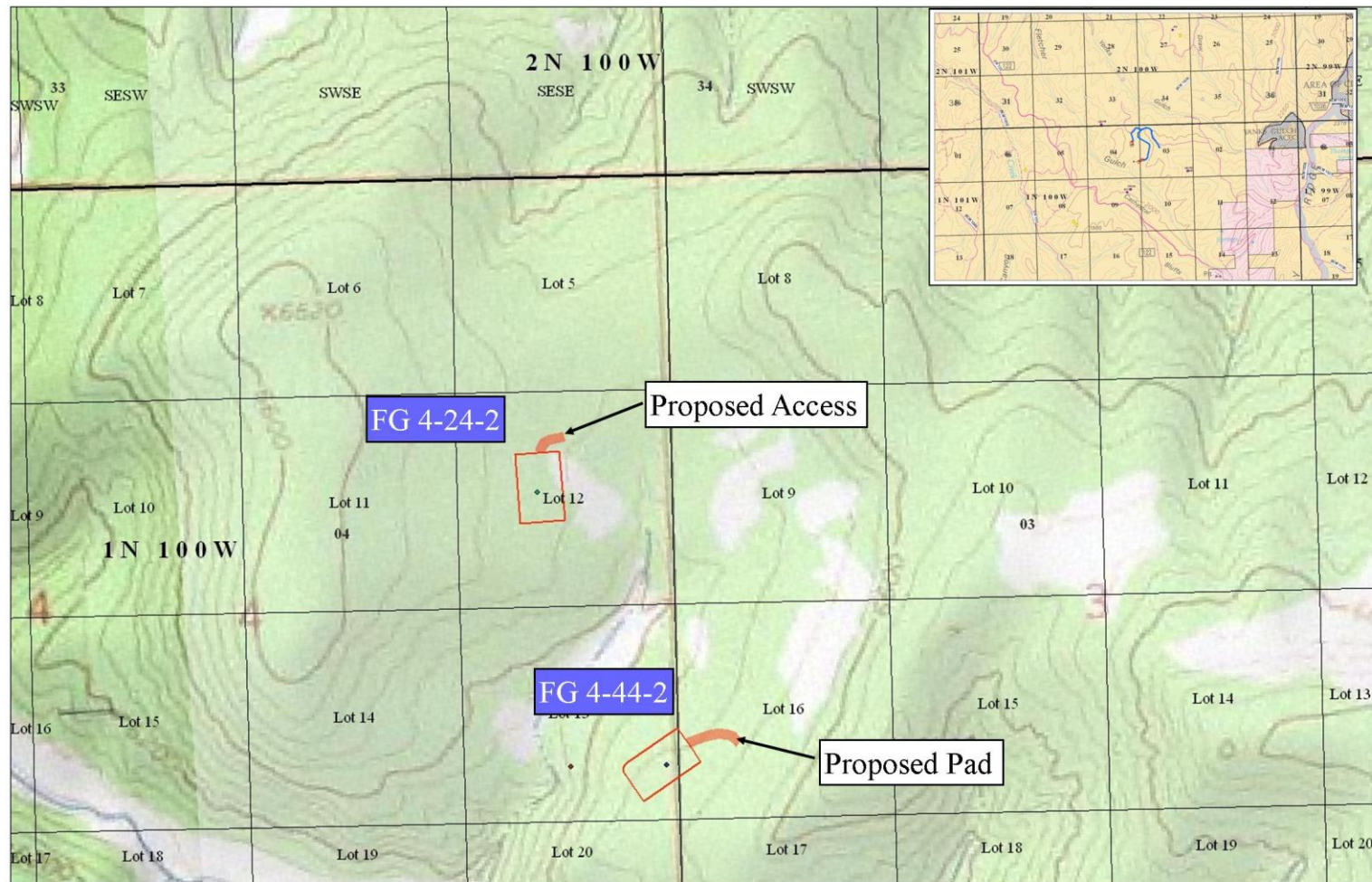


Figure 2. The figure above illustrates the geographic location of each proposed well pad (symbolized as a red polygon) and existing topography. The proposed access corridors are symbolized as a transparent red line. Construction activities would begin in January, 2011.

**U.S. Department of the Interior  
Bureau of Land Management  
White River Field Office  
220 E Market St  
Meeker, CO 81641**

**DECISION RECORD**

**PROJECT NAME:** Laramie Energy's Proposed Fletcher Gulch Wells FG 4-44-2 and FG 4-24-2 (2 APDs)

**CATEGORICAL EXCLUSION NUMBER:** DOI-BLM-CO-2011-0166-CX(390)

**DECISION:**

It is my decision to implement the Proposed Action, as mitigated in DOI-BLM-CO-2011-0166-CX(390) authorizing construction, operation, and maintenance activities for the proposed well pads and access roads (including issuing ROW grants for portions of the 4-44-2 pad and access roads).

**Mitigation Measures:**

1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for disturbing or collecting vertebrate fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands.
2. If any paleontological resources are discovered as a result of operations under this authorization, the operator or any of his agents must stop work immediately at that site, immediately contact the BLM Paleontology Coordinator, and make every effort to protect the site from further impacts, including looting, erosion, or other human or natural damage. Work may not resume at that location until approved by the AO. The BLM or designated paleontologist will evaluate the discovery and take action to protect or remove the resource within 10 working days. Within 10 days, the operator will be allowed to continue construction through the site, or will be given the choice of either (a) following the Paleontology Coordinator's instructions for stabilizing the fossil resource in place and avoiding further disturbance to the fossil resource, or (b) following the Paleontology Coordinator's instructions for mitigating impacts to the fossil resource prior to continuing construction through the project area.
3. If it becomes necessary to excavate into the underlying sedimentary rock formation to construct the reserve/blooiie/cuttings pit or bury any well tie pipelines an approved paleontological monitor shall be present on site before any such excavations begin and shall remain until all such excavation operations have been completed.
4. If any archaeological materials are discovered as a result of operations under this authorization, activity in the vicinity of the discovery will cease, and the BLM WRFO

Archaeologist will be notified immediately. Work may not resume at that location until approved by the AO. The operator will make every effort to protect the site from further impacts including looting, erosion, or other human or natural damage until BLM determines a treatment approach, and the treatment is completed. Unless previously determined in treatment plans or agreements, BLM will evaluate the cultural resources and, in consultation with the State Historic Preservation Office (SHPO), select the appropriate mitigation option within 48 hours of the discovery. The operator, under guidance of the BLM, will implement the mitigation in a timely manner. The process will be fully documented in reports, site forms, maps, drawings, and photographs. The BLM will forward documentation to the SHPO for review and concurrence.

5. Pursuant to 43 CFR 10.4(g), the operator must notify the AO, by telephone and written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), the operator must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.
6. No activities associated with both the FG 4-44-2 and the FG 4-24-2 locations (e.g., drilling, construction, etc.) will be allowed from November 1 through December 30 to prevent disruption of mule deer during the rut and prior to their movement to lower elevations. Any activities, including pad construction, drilling, completion activities, and vehicle traffic associated with well development initiated prior to November 1 must be completed or cease by October 31.
7. The designated Natural Resource Specialist (NRS) will be notified via email or by phone 24 hours prior to beginning all construction-related activities associated with this project that result in disturbance of surface soils. Construction-related activities may include, but are not limited to, pad and road construction, etc. Notification of all construction-related activities, regardless of size, that result in disturbance of surface soils as a result of this project is required.
8. In an attempt to track interim and final reclamation of federal actions related to the development of federal mineral resources, the operator shall provide the designated Natural Resource Specialist with geospatial data in a format compatible with the WRFO's ESRI ArcGIS Geographic Information System (GIS). These data will be used to accurately locate and identify all geographic as-built (i.e., constructed) features associated with this project and included in the Application for Permit to Drill (APD) or Sundry Notice (SN), as appropriate. These data shall be submitted within 60 days of construction completion. If the operator is unable to submit the required information within the specified time period, the operator shall notify the designated Natural Resource Specialist via email or by phone, and provide justification supporting an extension of the required data submission time period. GIS polygon features may include, but are not limited to, constructed access roads, existing roads that were upgraded, pipeline corridors, and well pad footprints. Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better; (2) ESRI shapefiles or geodatabases; or, (3) AutoCAD .dwg or .dxf files. If possible, both (2) and (3) should be submitted for each as-build feature. Geospatial data must be submitted in UTM Zone 13N, NAD 83, in units of meters. Data may be submitted as: (1) an email attachment;

or (2) on a standard compact disk (CD) in compressed (WinZip only), or uncompressed format. All data shall include metadata, for each submitted layer, that conforms to the *Content Standards for Digital Geospatial Metadata* from the Federal Geographic Data Committee standards. Questions shall be directed to WRFO BLM GIS staff at (970) 878-3800.

If the operator is unable to send the data electronically, the operator shall submit the data on compact disk(s) to:

BLM, White River Field Office  
Attn: NRS Staff  
220 East Market Street  
Meeker, Colorado 81641

Internal and external review of the reporting process and the adequacy of the associated information to meet established goals will be conducted on an on-going basis. New information or changes in the reporting process will be incorporated into the request, as appropriate. Subsequent permit application processing may be dependent upon successful execution of this request, as stated above.

If for any reason the location or orientation of the geographic feature associated with the Proposed Action changes, the operator shall submit updated GIS data to designated BLM NRS staff person within 7 calendar days of the change. This information shall be submitted via Sundry Notice.

9. A Reclamation Status Report will be submitted electronically via email and as a hard-copy to WRFO Reclamation Coordinator. Please submit the hardcopy to:

BLM, White River Field Office  
220 East Market Street  
Meeker, Colorado 81641  
Attn: Brett Smithers

The Reclamation Status Report will be submitted annually for all actions that require disturbance of surface soils on BLM-administered lands as a result of the Proposed Action. Actions may include, but are not limited to, well pad and road construction, construction of ancillary facilities, or power line and pipeline construction. The Reclamation Status Report will be submitted by September 30<sup>th</sup> of each calendar year, and will include the well number, API number, legal description, UTM coordinates (using the NAD83 datum, Zone 13N coordinate system), project description (e.g., well pad, pipeline, etc.), reclamation status (e.g., Phase I Interim, Phase II Interim, or Final), whether the well pad or pipeline has been re-vegetated and/or re-contoured, percent of the disturbed area that has been reclaimed, method used to estimate percent area reclaimed (e.g., qualitative or quantitative), technique used to estimate percent area reclaimed (e.g., ocular, line-intercept, etc.), date seeded, photos of the reclaimed site, estimate of acres seeded, seeding method (e.g., broadcast, drilled, hydro-seeded, etc.), and contact information for the person(s) responsible for developing the report. The report will be accompanied with maps and GIS data showing each discrete point (i.e.,

well pad), polygon (i.e., area where seed was applied for Phase I and/or Phase II interim reclamation or area reclaimed for final reclamation), or polyline (i.e., pipeline) feature that was included in the report. Geospatial data shall be submitted: for each completed activity electronically to the designated BLM staff person responsible for the initial request and in accordance with WRFO geospatial data submittal standards (available from WRFO GIS Staff, or on the WRFO website). Internal and external review of the WRFO Reclamation Status Report, and the process used to acquire the necessary information will be conducted annually, and new information or changes in the reporting process will be incorporated into the report.

The following applicable mitigation from CO-110-2006-200-EA and CO-110-2009-180-EA has been carried forward:

1. Laramie Energy will comply with all local, state, and federal air quality regulations and provide documentation to the BLM that they have acquired all necessary state and federal permits. To minimize fugitive dust created by construction and drilling activities, Laramie Energy may wet disturbed areas with fresh water from a permitted source. Vehicle traffic may also be restricted to speeds that would minimize fugitive dust. Adherence to reclamation requirements for surface disturbance activities (refer to Water Quality and Soils) would be followed to stabilize disturbed soils and blowing dust.
2. Proper seeding and monitoring of the disturbed areas will reduce the potential for invasive, non-native species to establish. Adherence to BLM reclamation measures will minimize impacts from invasive, non-native species. Cleaning of all vehicles and heavy machinery to remove seed and soil prior to construction and drilling activities would also reduce the potential for the introduction of invasive species into the project area. Laramie Energy will be required to monitor the project area for noxious and invasive species for a minimum of three years after disturbance. All noxious and invasive species which occur on site would be eradicated using materials and methods approved in advance by the BLM.
3. Laramie Energy would be responsible for implementing mitigation measures that minimize bird injuries or mortalities as a result of contact with reserve pits. The most common measure being used is placing netting or wiring over reserve pits. Laramie Energy will notify the BLM of the method that will be used to prevent impacts to birds two weeks prior to the date when completion activities are expected to begin via Sundry Notice. The BLM-approved method will be applied within 24 hours after completion activities have begun. All lethal and non-lethal events that involve migratory birds will be reported to the Petroleum Engineer Technician immediately.
4. Laramie Energy will comply with “Gold Book” fourth edition surface operating standards for all surface disturbing activities (copies of the “Gold Book” fourth edition can be obtained at the WRFO). Laramie Energy will restrict non-emergency maintenance activities on associated access roads when soils become saturated to a depth of three inches or more. Laramie Energy will be responsible for complying with all local, state, and federal water quality regulations (such as but not limited to Phase I Storm Water Permit, Army Corps Section 404 permit coverage, and Industrial Wastewater/Produced Water Permits).

5. Laramie Energy will consult with the State of Colorado Water Quality Control Division regarding Stormwater Discharge Permits prior to commencing construction activities. Construction activities that disturb one acre or greater require a Stormwater Discharge Permit. Written documentation to the BLM Authorized Officer is required within 30 days of the APD approval date to indicate that appropriate permits have been obtained. Written documentation may be a copy of the Stormwater Discharge Permit or an official verification letter from the State Water Quality Control Division to Laramie Energy that includes the Permit Certification Number. For further information contact Bob Lange, WRFO Hydrologist at 970-878-3831.
6. To mitigate additional soil erosion and potential increased sediment and salt loading to nearby surface waters, all disturbed areas affected by drilling or subsequent operations, except areas needed for production operations, shall be reclaimed to their original condition and shall be maintained to control dust and minimize erosion (COGCC). To allow optimal opportunity for interim reclamation of well pads, all tanks and production facilities will be situated on the access road side of the well pad (unless otherwise approved by the WRFO-BLM Area Manager). Interim reclamation of well pads and final reclamation of rights of ways (ROW) will commence as follows:
  - Stockpiled topsoil and spoil piles will be separated and clearly identified to prevent mixing during reclamation efforts. Topsoil stockpiles will be seed with a BLM approved seed mixture.
  - Stockpiled topsoil segregated from spoil piles will be replaced during reclamation in its respective original position (last out, first in) to minimize mixing of soil horizons.
  - Stockpiled soils (spoil and topsoil) will be pulled back over all disturbed surfaces affected by drilling or subsequent operations, except areas reasonably needed for production operations. Areas not needed for production operations shall be partially reshaped as early and as nearly as practicable to near pre-construction contours.
  - Laramie Energy will ensure stockpiled topsoil is evenly distributed over the top of spoil used in partial reshaping efforts.
  - The partially reshaped area will be seeded with a BLM approved seed mixture, and all slopes exceeding 5 percent will be covered with wildlife friendly biodegradable fabrics (such as but not limited to Jute blankets, Curlex, etc.) to provide additional protection to topsoil, retain soil moisture, and help promote desired vegetative growth.
  - Following seeding and placement of biodegradable fabrics, woody debris cleared during initial construction will be pulled back over the partially reshaped area to act as flow deflectors and sediment traps. Woody debris will be evenly distributed over the entire portion of the reclaimed area and will not account for more than 20 percent of total ground cover.
  - Laramie Energy will be responsible for excluding livestock from all reclaimed portions of well pads. To eliminate livestock utilization of reclaimed areas prior to successful reclamation, a 4-strand BLM Type-D barbed wire fence braced with wooden H-posts at each corner will be constructed around all reclaimed portions of well pads including cut and fill slopes following placement of woody debris. Cattle guards would also be installed where fences cross access roads.
  - Laramie Energy will be required to monitor all reclaimed areas for signs of erosion and the presence of noxious and invasive plant species. If problems arise Laramie Energy will consult with the BLM for further assistance.

- It will be the responsibility of Laramie Energy to continue revegetation/reclamation efforts until vegetative communities on all disturbed surfaces are composed of desirable seeded vegetation (as determined by the BLM). Laramie Energy will be responsible for achieving a reclamation success rate of sufficient vegetation ground cover from reclaimed plant species within three growing seasons after the application of seed. The ground cover of reclaimed seed species shall be comparable to that of the nearby undisturbed plant communities at a Potential Natural Community (PNC) state in relation to the seed mix as deemed appropriate by the BLM. Rehabilitation efforts must be repeated if it is concluded that the success rate is below an expectable level as determined by the BLM.
7. Upon final abandonment of well pads, 100 percent of all disturbed surfaces (including newly constructed access roads) will be restored to pre-construction contours, and revegetated with a BLM preferred seed mixture. Existing two-track roads improved for fluid mineral development will be reclaimed as nearly as practicable to original conditions. Natural drainage patterns will be restored and stabilized with a combination of vegetative (seeding) and non-vegetative (straw bales, woody debris, straw waddles, biodegradable fabrics) techniques. All available woody debris will be pulled back over recontoured areas (woody debris will not account for more than 20 percent of total surface cover) to help stabilize soils, trap moisture, and provide cover for vegetation. Monitoring and additional reclamation efforts will persist until reclamation is proven successful (as determined by the BLM).
  8. The White River ROD/RMP (USDI BLM 1997) includes Conditions of Approval (COAs) for all surface disturbing activities, road construction and maintenance, and oil and gas exploration. Laramie Energy will be required to implement these COAs on-site as conditions warrant. COAs for surface disturbing activities and road construction and maintenance that are pertinent to minimizing the Proposed Action's impacts to surface and groundwater quality include:
    - Topsoil should be stripped from the surface and stockpiled for reclamation. When topsoil is stockpiled on slopes exceeding 5 percent, construct a berm or trench below the stockpile.
    - Sedimentation shall be diverted and/or run through catchment basins to protect surface waters.
    - All sediment control structures or disposal pits will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years.
    - All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the AO.
    - There shall be no mud blading of roads.
    - Provide vegetative or artificial stabilization of cut and fill slopes. Avoid establishment of vegetation where it inhibits drainage from the road surface.
    - Provide for erosion-resistant surface drainage prior to fall rain or snow.
    - Maintenance should be performed to conserve existing surface material, retain the original crowned or outsloped self-draining cross section, prevent or remove rutting berms (except those designed for slope protection) and other irregularities that retard normal surface runoff.
    - All fluid storage tanks shall have a dike constructed around the tank of sufficient capacity to adequately contain at least 110 percent of the storage capacity of the tank.
    - Pits designed to contain fluids shall be constructed so that leaking or breaching problems are minimized and reclamation potential is maximized. When fractured rock or porous materials



are encountered, pits shall be lined with bentonite or an impermeable membrane to prevent leakage.

- Aquifers beneficial for human consumption encountered during the drilling process must be properly isolated to reduce the potential for contamination.
9. All road and well pad construction must adhere to “Gold Book” (Fourth Edition) surface operating standards for oil and gas exploration and development. A copy of the “Gold Book” (Fourth Edition) can be obtained at the WRFO. Laramie Energy will be responsible for segregating topsoil material and backfilling of topsoil in its respective original position (last out, first in) to assist in the reestablishment of soil health and productivity. Erosion and sediment control measures will be installed on all slopes exceeding five percent to mitigate soil loss. Erosion and sediment control measures will be maintained until stream banks and adjacent upland areas are stabilized. All disturbed surfaces will be restored to natural contours and revegetated with a BLM approved seed mixture. Interim reclamation will follow the mitigation outlined in the Water Quality portion of this document. Furthermore, Laramie Energy will be responsible for monitoring salts leaching from soils. If large salt deposits begin to appear, Laramie Energy will notify BLM, together they will coordinate the application of best management practices to help mitigate the problem.
  10. Laramie Energy would be responsible for reclamation of unused portions of well pads, including re-seeding with a BLM-approved seed mix and noxious weed management. Seed mixes that should be used for reclamation are provided in Table 1 and are based on the ecological site defined by the soil mapping units within the project area (USDI BLM 1994). Laramie Energy would be required to monitor the project area for a minimum of 3 years after construction to detect the presence of noxious/invasive species. If found, noxious weeds would be eradicated using materials and methods approved in advance by the AO. Stripped topsoil and vegetation would be stockpiled for subsequent reclamation of unused areas of the well pads.

Table 1. Native seed mixes appropriate for reclamation efforts for the proposed project area.

Seed Mix	Species	Lbs/Acre	Range Site Occurring in the Project Area
2	Western wheatgrass (Arriba)	3	Clayey foothills, clayey slopes
	Streambank wheatgrass (Sodar)	2	
	Thickspike wheatgrass (Critana)	2	
	Fourwing saltbush (Wytana, Ricon)	2	
4	Western wheatgrass (Rosanna)	2	Piñon-juniper woodlands, stony foothills
	Bluebunch wheatgrass (Secar)	2	
	Thickspike wheatgrass (Critana)	2	
	Indian ricegrass (Nezpar)	1	
	Fourwing saltbush (Wytana)	1	
	Utah sweetvetch	1	
7	Bluebunch wheatgrass (Secar)	2	Deep clay loam
	Slender wheatgrass (Primar)	2	
	Big bluegrass (Sherman)	1	
	Canby bluegrass (Canbar)	1	
	Mountain brome (Bromar)	2	

11. Any spills or releases of hazardous substances would be cleaned up and disposed of in accordance with applicable requirements and spill response plans.
12. Proposed well # 4-44 has been moved approximately 200 feet east of its original location to an alternate site outside the BLM's NSO raptor buffer. Consistent with the White River ROD/RMP, construction, drilling, and completion operations associated with location # 4-44 would be subject to a timing restriction disallowing activity from February 1 to August 15 or until it has been determined that the raptor nest site is not occupied or the young have fledged.
13. Fire avoidance and prevention measures would be implemented and described in the APD's Surface Use Plan. Laramie Energy has two options for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12 inches in diameter and 15 feet' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and effectively breaks down the woody fuel thereby eliminating any hazardous fuel load adjacent to the new roads and well pads. The other option would be to cut trees and have them removed for firewood, posts, or other products. The branches and tops should be lopped and scattered to a depth of 24 inches or less. Some of the boles of the trees should be retained to be brought back onto reclaimed areas as stated in the Water Quality Section. These stored materials must not be windrowed as they will result in an elevated hazardous fuel situation and when placed onto reclaimed areas, the material should be evenly scattered, so as to not create jackpots, not to exceed 5 tons /acre.
14. As listed in the COAs for all surface disturbing activities (USDI BLM 1997), Laramie Energy would be required to purchase from the BLM all trees that would be removed as a result of the Proposed Action. Reclamation measures required by Laramie Energy are described in the Vegetation Section. In general, Laramie Energy would revegetate all unused portions of the well pads with a native seed mix to stabilize soils and regenerate native vegetation. Well pads would be fenced to exclude livestock during interim reclamation. Monitoring for invasive species during interim reclamation would occur for three years.
15. The proposed wells would be cemented and cased to prevent contamination of natural gas or produced water from impacting geological substrates and aquifers. If additional wells are proposed for the project area in the future, limit future development to a sustainable amount.
16. All aquifers encountered during the drilling that have potential for development as a water well will be evaluated for use by the BLM as a water source well at the time the well is proposed to be plugged. Suitable wells would have plugging procedures altered to plug back to the water zone, at which point, the BLM would assume liability for the well and file for the appropriate water rights.
17. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in

excess of three inches deep, the soil shall be deemed too wet to adequately support construction equipment.

18. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, Laramie Energy shall obtain from the AO written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the AO. Emergency use of pesticides shall be approved in writing by the AO prior to such use.
19. Laramie Energy shall protect all survey monuments found within the ROW. Survey monuments include, but are not limited to, General Land Office (GLO) and BLM Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, Laramie Energy shall immediately report the incident, in writing, to the AO and the respective installing authority if known. Where GLO or BLM ROW monuments or references are obliterated during operations, Laramie Energy shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands in the United States, latest edition. Laramie Energy shall record such survey in the appropriate county and send a copy to the AO. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, Laramie Energy shall be responsible for the survey cost.
20. Laramie Energy shall uniformly spread topsoil over all unoccupied disturbed area (outside the ditch line, fence line, and work area). Spreading shall not be done when the ground or topsoil is frozen or wet.
21. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
22. If snow removal from road is undertaken, equipment used for snow removal operations shall be equipped with shoes to keep the blade 3 inches off the road surface. Holder shall take special precautions where the surface of the road is uneven and at drainage crossings to ensure that equipment blades do not destroy vegetation.
23. Under no circumstances, will mud-blading be allowed at any time.
24. As directed by the AO, all road segments shall be winterized by providing a well-drained roadway by water baring, maintaining drainage, and any additional measures necessary to minimize erosion and other damage to the roadway or the surrounding public land.

25. All permanent (i.e., onsite for six months or longer) structures, facilities, and equipment placed onsite shall be low profile and painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation.

### **COMPLIANCE WITH LAWS & CONFORMANCE WITH THE LAND USE PLAN**

This decision is in compliance with the Endangered Species Act and the National Historic Preservation Act. It is also in conformance with the 1997 White River Record of Decision/Approved Resource Management Plan.

### **PUBLIC INVOLVEMENT**

Internal scoping was initiated when the project was presented to the White River Field Office (WRFO) interdisciplinary team on 3/8/2011. External scoping was conducted by posting this project on the WRFO's on-line National Environmental Policy Act (NEPA) register.

### **RATIONALE**

The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with Section 390 of the Energy Policy Act. Additional support for categorically excluding this action from further documentation under NEPA was based on the fact that, in addition to meeting the individual action disturbance criteria (i.e., each individual action, if approved and implemented, will result in less than 5 acres of surface disturbance), the anticipated impacts associated with this action were adequately mitigated in CO-110-2006-200-EA and CO-110-2009-180-EA.

### **ADMINISTRATIVE REMEDIES**

#### **State Director Review**

Under regulations addressed in 43 CFR 3165.3(b), any adversely affected party that contests a decision of the Authorized Officer may request an administrative review, before the State Director, either with or without oral presentation. Such request, including all supporting documentation, shall be filed in writing with the BLM Colorado State Office at 2850 Youngfield Street, Lakewood, Colorado 80215 within 20 business days of the date such decision was received or considered to have been received. Upon request and showing of good cause, an extension may be granted by the State Director. Such review shall include all factors or circumstances relevant to the particular case.

#### **Appeal**

Any party who is adversely affected by the decision of the State Director after State Director review, under 43 CFR 3165.3(b), of a decision may appeal that decision to the Interior Board of Land Appeals pursuant to the regulations set out in 43 CFR Part 4.

**SIGNATURE OF AUTHORIZED OFFICIAL:**

  
Field Manager

**DATE SIGNED:**

11/10/11